

discussion paper

71

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Regional Development: Overview on five
European Regions
An INSURED Document

EURES discussion paper dp-71
ISSN 0938-1805

1998

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This discussion paper was written within the research project “**Instruments and Strategies for Sustainable Regional Development**” (INSURED) in the EC Environment and Climate Research Programme (1994-1998): Research Theme 4: Human Dimension of Environmental Change (Contract ENV-CT96-0211).

The project was carried out by

- EURES-Institute for Regional Studies in Europe, Freiburg/ Germany (Coordinator)
- SRS, Studio Ricerche Sociali, Firenze/ Italy
- ÖAR Regionalberatung GesmbH, Österreichische Arbeitsgemeinschaft für eigenständige Regionalentwicklung, Wien/ Austria
- SICA Innovation Consultants Ltd., Dublin/ Ireland
- SIASR, Schweizerisches Institut für Aussenwirtschafts-, Struktur- und Regionalforschung, University of St. Gallen/ Switzerland

The project was sponsored by

- The Commission of the European Union, DG XII Science, Research and Development
- The Federal Government of Austria
- The Government of Hessen and several Local Governments/ Germany
- The Federal Government of Switzerland
- The Region of Tuscany

INSURED

Instruments for Sustainable Regional Development

EC Environment and Climate Research Programme

Regional Development: Overview on five European Regions

An INSURED Document

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Available INSURED Reports and discussion papers:

Instruments for Sustainable Regional Development

The INSURED Project - Final Report

Ruggero Schleicher-Tappeser et al. (1998), EURES Report 9, Freiburg i.Br.

Instrumente für eine nachhaltige Regionalentwicklung

Das INSURED-Projekt – Schlußbericht (deutsch/englisch)

Ruggero Schleicher-Tappeser et al. (1998), EURES Report 10, Freiburg i.Br.

The Mid West Region of Ireland

An INSURED Case Study on Sustainable Regional Development

Gerry P. Sweeney et al. (1998), EURES discussion paper dp-66, ISSN 0938-1805 Freiburg i.Br.

Lower Styria

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Central Hessen

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Mittelhessen

Eine INSURED-Fallstudie zur nachhaltigen Regionalentwicklung

Rainer Röder und Ruggero Schleicher-Tappeser (1998), EURES discussion paper dp-70, ISSN 0938-1805, Freiburg i.Br., 100 S., (translation of dp-69)

Regional Development: Overview on five European Regions

An INSURED Document

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The EU Agricultural Policy

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Jim Walsh (1998), EURES discussion paper dp-72, ISSN 0938-1805 Freiburg i.Br.

Sustainable Regional Development: An Integrated Approach

Ruggero Schleicher-Tappeser et al. (1997), EURES discussion paper dp-60, ISSN 0938-1805 Freiburg i.Br.

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1 Introduction

Task 2 of the scientific study „Instruments for sustainable regional development“ foresees the comparative description of the regional development in the examined regions.

The research team applied the following methodology:

- The description was very exhaustive in each case, because it should serve as „quarry“ for further more detailed analyses. The long versions have not been published. They are handled as internal papers.
- The description followed a structural model combining sectoral with territorial approaches, analytical with holistic views, as well as „digital“ with „analogous“ information. In general, statistical material and secondary literature was processed in a most pragmatic manner.
- For creating a template for the task implementation, we set up a series of tables following an Ariadne thread through the three main „capitals“ which constitute a „region“:
 - **„Human capital“** with its individual and societal, historical, cultural, educative and communicative expressions;
 - **„Human-made capital“** comprising the assets held by private and public infrastructure and enterprise, the economic and financial sphere, habitat, research and technology issues;
 - **„Natural capital“** based on the environment and the natural resources in the area, including the human „internal environment“, better known as „health“; as the notions of health and security are closely linked, they lead us back to politics and thus to the point of departure, the „human capital“, moving somewhat along a moebius loop. This approach is different from „classical“ views which put „health“ and „security“ in the „human capital“ section. However, borderlines are fuzzy.
- The more static picture of the region was animated by a glimpse upon the recent past and future trends (**intertemporal**) as well as the relationships and exchanges with the outside world (**interregional**). Furthermore and most importantly, we tried to identify **„innovative actions“ (from bottom up) and „supporting missions“ (from top down)**, which we regarded as hypothetical cornerstones for a shift to a more sustainable development; we based the selection of innovative actions and supporting missions on the theoretical work done within **task 1, the „conceptualization of sustainable regional development“**. In fact the theoretical and empirical work were advancing in parallel on the winding path to an improved conceptual and methodological knowledge of what could be „policies for sustainable regional development“.

The results of the exercise:

- Each partner has a voluminous study of the examined regions at hand. Their content varies according to the availability of data and information and to the specificities of the respective region. These documents are for internal use and not reproduced, but they can be delivered on demand.
- **The long versions have been boiled down by each partner to**
 - **A regional SWOT analysis**

- **A presentation summarizing innovative actions and corresponding supporting missions.**
- **A brief appraisal of the state of the human, the human-made and the natural capital in each region.**

These three sections for five regions are presented in the main part of the study together with a rough comparison of the main characteristics.

The papers mainly reflect the data available up to the second half of 1996, when task 2 was carried out.

2 Comment on the Macroeconomic Context

Before starting the description of the project regions' specificities we throw a light on their macroeconomic national background.

- Three of the regions always belonged to „hard currency countries“ (D, AT, CH). After a relatively weak period Italy and Ireland stabilized their **currencies** towards the end of the eighties.
- The **active population (from 15 to 64 years)** is mostly stable and equal, with a lowest level of 58,6% in Ireland (1960) and a highest level of 69,7% in Germany (1984). Because of the relative growth of the older population the rate is generally declining except in Austria and Ireland, where this process is lagging behind.
- The share of **female labour force** is converging in all the countries around the 40% level, but still is the lowest in Ireland and Italy, whereas it has always been the highest in Austria.
- **Unemployment** is rising everywhere except in Ireland, which in 1994 is still in the „leading position“ with 14,8%. In the long run these figures seem to converge on a rather high level (8-10%).
- The **real GDP per capita** points downward in each country except Ireland which shows a sharp rise since the eighties, when the EU Structural Funds started to inject money into its economy.
- The **net borrowing of governments**, one of the convergence criteria for the single currency, shows a gap between the „hard currency countries“ and the „weak currency countries“ with a high share of objective 1 regions.
- The **export rate of goods and services** was clearly rising between the sixties and eighties in all countries, since then remaining more or less stable except in Ireland, which reached a 72% level in 1994 (more than 10% being repatriated as profits by multinationals).
- **Net household savings**, an indicator for the real power of purchase, show converging figures with Switzerland in a leading role.
- **Consumer price indices** as an indicator for inflation, another stability criterion, are converging at a low level after a peak in the seventies, especially in the „weak currency countries“ (Ireland, Italy). The stabilisation is especially tangible for Ireland (today's rate is at 1,6%).
- **Nominal long-term interest rates**, another convergence criterion, are high until 1989. Since then they show decreasing tendencies. Again Ireland and Italy have higher rates than the rest.

3 Comparative Overview

	Mittelhessen	Süd- und Ost- Steiermark	St.Gallen/Appenzell	Midwest	Tuscany
Political system	Decentralized, subsidiary (counterflow principle)	Federalist, Land-based	Decentralized, participative	Centralized (to the capital Dublin)	In transition: from centralized system towards decentralisation and subsidiarity
Population (approx.)	1.000.000 stable	800.000 stable	400.000 rising	300.000 rising	3.500.000 stable
Size in km²	3.700	6.800	2.400	7.000	23.000
Dominant regional identity patterns	Local communities and municipalities; strong influence from the Frankfurt agglomeration in the Western part	Strong Land identity, dominance of the capital Graz	Cantonal, with strong influences from Zürich and Rhine region in the peripheries	Strong county identity, stronger regional identity than elsewhere in IRL	„Polis“ identity with a strong urban tradition
Main problems	ICE speed link to Frankfurt (from Cologne) is exerting a strong pull on the Western part Commuting and unemployment in peripheral areas Agricultural decline	Uneven development between the central part (Graz) and the periphery multi-utilisation of the Mur basin and other river valleys (pressure on resources) Agricultural decline	Lacking industries in branches with high value added in a context of a high rate of agriculture and industry in general Traffic congestion and commuting Dispersed habitat Agricultural decline	Bureaucratic centralism Overreliance on foreign industrial sector with weak local linkages; weak indigenous sector Social exclusion and unemployment; 1/3 below poverty line Education biased toward academic with weak vocational training/education Natural heritage areas of international importance under threat from inappropriate agriculture and tourism development Pollution by intense farming Inappropriate forest plantations	Conflict of competences between State-Region-Local Authorities Financial problems due to State deficit Household and industrial waste accumulation Traffic congestion around city centers (Pisa, Firenze)

	Mittelhessen	Süd- und Ost- Steiermark	St.Gallen/Appenzell	Midwest	Tuscany
Main strengths	<p>Good qualification level and innovative universities</p> <p>Diversified production structure</p> <p>Good infrastructure</p>	<p>Good cooperation between industry and research in key industries</p> <p>Technical skills and village-based mutual help among rural people</p>	<p>Use of new technologies by SMEs</p> <p>Traditional communal work</p>	<p>High quality physical environment</p> <p>Social interrelationships</p> <p>Network of community and development associations based on strong tradition of local cooperation including credit unions, religious and leisure activities</p> <p>Regional development agency (established 1957)</p>	<p>Urban based formal and informal networks fostering local development</p> <p>Strong traditional and modern industrial districts and SMEs</p>
Innovative courses of action - examples	<p>Knowledge and technology transfer (TTZ)</p> <p>Local initiatives for employment (ZAUG)</p>	<p>Solar heating self-build movement (AEE)</p> <p>ÖKOPROFIT and Agenda 21 programme of Graz</p> <p>Farmers initiatives in quality production, marketing and biomass production</p>	<p>Electronic mall Bodensee</p> <p>Public-private partnerships linking agricultural production with marketing and tourism activities</p> <p>Wood chain Appenzell</p> <p>Territorial policy in Appenzell-Außerrhoden</p>	<p>Ballyhoura Development Association</p> <p>PAUL Partnership Limerick (Peoples action against unemployment)</p> <p>Limerick Civic Trust (renewal of architectural heritage)</p>	<p>Vocational guidance system</p> <p>Regional network of technology (RRAT)</p> <p>Change in power sharing (towards subsidiarity)</p> <p>Pact for Development and Employment</p>

4 Description of the Project Regions

The following descriptions are structured according to the same template:

☐ STRENGTHS - WEAKNESSES - OPPORTUNITIES - THREATS

This section gives a profile of the regions' dynamics and challenges. We conceive strengths as potentials which can be turned into opportunities for neutralizing threats and compensate weaknesses.

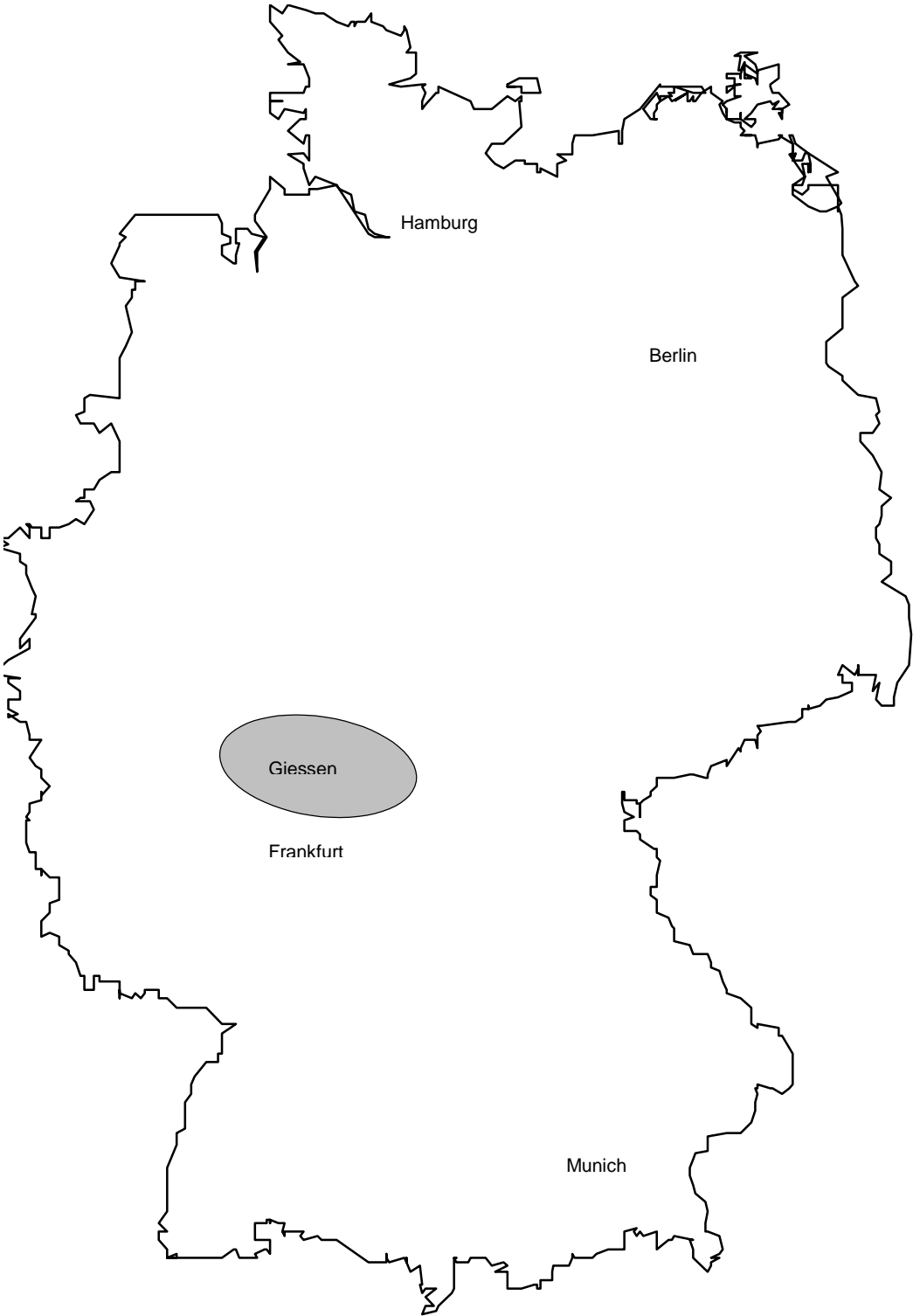
☐ INNOVATIVE COURSES OF ACTION AND SUPPORTING MISSIONS

This section gives a profile of the main forces which grow from bottom-up initiatives and the main tendencies and strands of policies top down which influence those efforts.

☐ STATE OF THE THREE CAPITALS (HUMAN, HUMAN-MADE, NATURAL)

This section gives a profile of the actual state of the socio-cultural, economic and natural assets, be it material or intangible.

4.1 Mittelhessen:



4.1.1 Analysis of Strengths, Weaknesses, Threats, Opportunities

Strengths

- Universities, level of education and technology transfer facilities
- Diversified structure of processing industry
- High qualification level of labor force, high share of SME
- Well developed infrastructure (transport, energy, water, sewage-treatment) in most parts
- Accessibility of Frankfurt city and Frankfurt airport
- Relatively low land prices
- Central location
- Polycentral structure and regional cooperation
- Use of renewable energies

Threats

- New transport links reshaping the „region“ (in terms of relative travel times)
- Development of agriculture (unused areas to be taken care of in the future)
- Development of tourism (decrease of beds and number of overnight stays)
- Export orientation of big companies and factories (structural change)
- Financing of public transport (in the less densely populated areas)

Weaknesses

- Area of industrial decline after early industrialisation
- Number of commuters above average (of Hesse)
- Number of jobless people (partly) above average (of Hesse)
- Partially missing commercial zones
- High share of industrial sector and low share of service sector (rc)
- Lack of regional identity („artificial region“ created 1981) - and regional image
- Missing risk capital
- Missing political representation
- No outstanding features of natural capital
- Transit traffic

Opportunities

- Knowledge and technology transfer (from universities)
- Local initiatives (in various fields of interest)
- Decentralized system of municipalities
- Conversion sites (areas previously used by the armed forces)
- Cultural events

4.1.2 Innovative Courses of Action and Supporting Missions

It is necessary to differentiate precisely between the political levels, since supporting missions are part of the **context** of innovative actions. Therefore actions and missions cannot be allocated to the same political level and therefore some of the innovative actions will be relabelled into supporting missions.

Otherwise, if actions and respective missions are on the same political level, we are facing a kind of **self-generated support**, which seems to be an interesting idea/ concept worthy of being discussed furtherly.

Innovative Courses of Actions

Examples of innovative actions are:

1. The **Mittelhessenrunde** as a negotiation forum for regional political actors and social partners.
2. **Regional and local initiatives** for the support of the respective part of the region: Among others there is the "joint authority Knüllgebiet" (Zweckverband Knüllgebiet) in Nordhessen, or the initiative "Region Spessart" (Region Spessart) in the South of Hessen. In Mittelhessen an "Organization for Regional Development in Mittelhessen (VMR)" (Verein Mittelhessischer Regionalentwicklung) was founded. In addition, Mittelhessen has a substantial share of the region Burgwald. There, a „Development Group Region Burgwald, registered association" (Entwicklungsgruppe Region Burgwald e.V.), started in October 1994.
3. Special attempts for **women's reintegration** into employment are supported by motivation and orientation courses. In the year 1992 the following courses were promoted in Mittelhessen: Courses of the Marburger organization „work and education, registered association" in Treysa, Gladenbach and Marburg. Courses of the „centre for work and environment Gießen, company with limited liability (ZAUG) in Gießen and Biebertal, as well as a course of the „institute for profession and social education, registered association" (IBS Linden) in Fulda. In addition, three advisory services are promoted.
4. In the meantime a subtle **technology transfer network** has emerged in Mittelhessen. All administrative districts are covered. The so called „transfer centre Mittelhessen,, (Transferzentrum Mittelhessen - TZM) in Gießen, the „service and innovation centre Vogelsberg" (Dienstleistungs- und Innovationszentrum Vogelsberg GmbH - DIVO) in Alsfeld, and the „Steinbeis transfer centre Limburg-Weilburg-Diez" (Steinbeis Transferzentrum Limburg-Weilburg-Diez) in Limburg work in a wide range of sectors. In addition to those named further institutions have started operation.
5. The so-called „Yellow house" in Schotten is a model project in Hessen. This **telematic centre** provides and mediates information to active citizens, provides training of IuC-techniques, and is equipped with an extensive media-center. Moreover, „Yellow house" will establish a central commercial service office for enterprises, organizations, and private persons. The project will soon embark on telecommuting projects in connection with the nodal region Rhine-Main.

Supporting Missions

Each of the named innovative actions is supported by Land programmes or at least political backing.

1. In the year 1986 the Mittelhessenrunde was already established on the initiative of the Minister of Economics. At present the Ministry of Economics is developing a further-

reaching strategy of the "**Regionalisation of the structural policy in Hessen**". According to this concept regionalisation is understood as a guided cooperation process. The process implies

- a) a decentralization of decision-making processes,
- b) an intensification of the intermunicipal cooperation,
- c) an integration of various policy fields, and
- d) the participation of different regional protagonists.

The objective of the regionalisation is to increase the competence of the regional population. Thereby the potential for endogenous development will be better recognised and mobilised.

2. Local initiatives are subsidized by the „**Hessian programm for the rural regional development**“ (Programm zur ländlichen Regionalentwicklung in Hessen). The „**Hessian cultural landscape programme**“ (Hessisches Kulturlandschaftsprogramm - HEKUL) exists since 1993. HEKUL transposes the regulation EWG no. 2078/92 to the Land legislation of Hessen. The support measures provide an incentive for agricultural enterprises to commit themselves to environmentally friendlier production methods. These production methods
 - a) will improve the the natural and economic production conditions,
 - b) will be compatible with the interests of environmental protection and the conservation of the natural habitats,
 - c) and will contribute to the balance at the markets.
3. The region Mittelhessen is also characterized by an above average rate of unemployment, and a high quota of people in need of welfare aid. Therefore, Mittelhessen takes part in the state programme „**Work instead of welfare aid**“ (Arbeit statt Sozialhilfe). The programme is designed for long-term unemployed persons receiving welfare and having lost the connection to the labour market. They pass through a two-year work programme at a standard wage. The objective is to train and qualify the attendees technically, personally and socially to enable them to have a chance on the general labour market again. To allow men and women with children to start employment the programme includes a supplementary element for child care.
- 4./5. The Hessian technology policy focusses on integrated environmental technologies, transfer of technology and innovation, cooperation between SMEs and with transfer facilities, as well as communication and information engineering. Technology transfer facilities are supported by the „**Hessian conversion programme**“ (Hessisches Konversionsprogramm), which partially operates on EU-funds. The programme is a means by which the Hessian government counteracts the negative income and employment effects of troop reduction measures. On the other hand the conversion-support raises the availability of commercial development areas without the necessity to use open landscape.

4.1.3 HUMAN CAPITAL

- 1,05 million inhabitants (195 inh./km²)
- varying population density (81 inh./km² - 293 inh./km²)
- population growth above state average

- foreign population below state average
- share of age groups of younger people above state average
- population forecasts expect further population growth
- two universities provide sufficient opportunities for further education
- developed system of adult education centres
- professional further education opportunities below state average

4.1.4 Human Capital

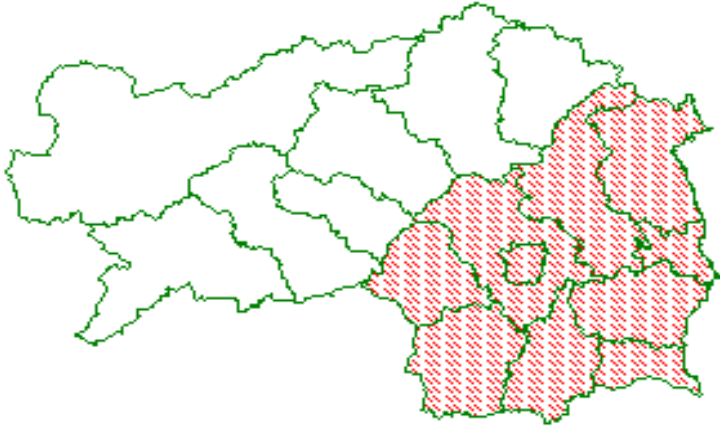
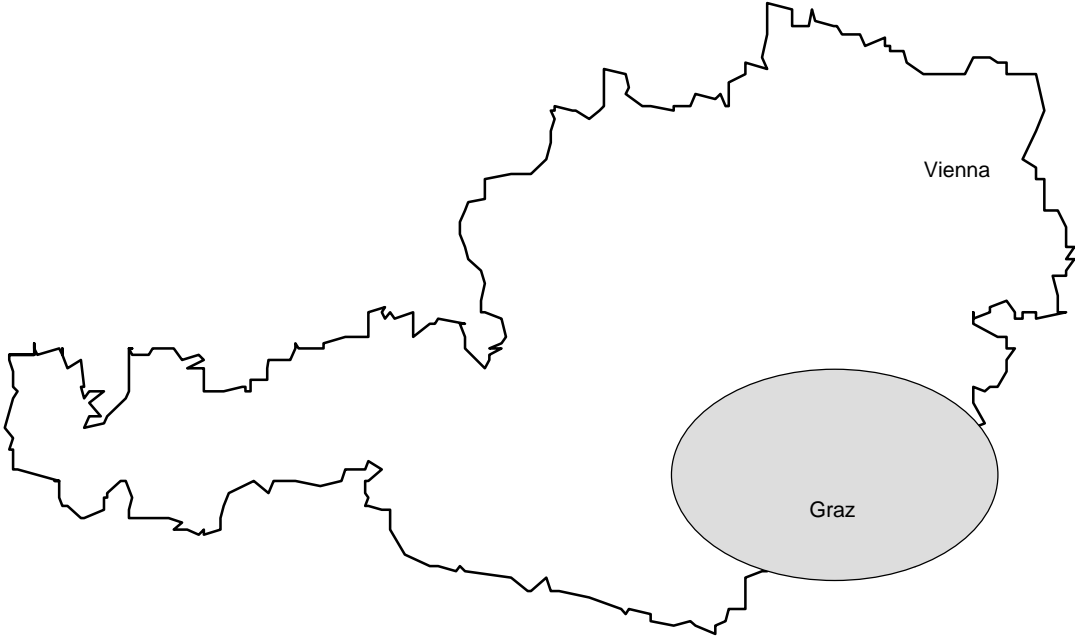
- high shares of professors, academic staff, and students, but only low number of special university institutes, other research-institutes and no institute belonging to industrial research associations
- currently rapidly growing number of technology oriented services, not all of which are properly financed for the future
- in some cases the chambers of trade and commerce are against subsidizing them
- overall declining number of farms
- increasing average size of companies, with significantly deviating results in some of the administrative districts and on the local level
- reduced dairy cow and pig keeping
- processing sector is the most important economic sector in Mittelhessen
- diversified sectoral structure
- local sectoral concentration of SMEs
- high share of small industrial enterprises in some districts
- importance of service sector lower than state average
- recently high rates of increase in some of the locations
- supply of accommodation for tourists considerably diminished
- number of arrivals and the number of overnight stays has fallen
- concentration and partly higher capacity utilization in tourism
- on the local level more specialised municipalities show positive development against the overall trend
- dense road network, with good supraregional road links
- railway network partly lacks capacity and/or modernisation, and there is no access to waterways
- sufficient supply of electricity and gas
- predominantly rural region with local characteristics of urbanization
- dispersed settlement structures with distinctive centres Marburg, Gießen and Wetzlar
- reuse of conversion sites offers new development opportunities

4.1.5 Natural Capital

- Despite growing population unchanged demand for drinking water within the region, due to
- reduced losses in the network, use of water saving technologies and withdrawal of troops, and unchanged water export to Südhessen
- significant increase of land use for housing, transport facilities etc.

- forests cover 40% of the land, with significantly variable results in some of the administrative districts (20-70%) and on local levels.

4.2 Lower Styria



4.2.1 Analysis of Strengths, Weaknesses, Threats, Opportunities

STRENGTHS	WEAKNESSES
<p>Strong „Styrian“ Land identity; environmental awareness of citizens and major parts of the administration; cooperative and interactive planning administration</p> <p>Outstanding renewable energy initiatives and agritouristic diversification based on the craftsmen’s skills and traditional mutual and self help system in the rural areas</p> <p>Networks between scientific institutions, business and administration supporting technological development in Graz</p> <p>Thriving automotive cluster in Graz, GU and the axis Weiz-Gleisdorf with outreaches to the Southern districts (LB, DL): Cars, transportation, mechanical and electrical engineering, electronics; support for advanced enterprises by economic promotion and advisory bodies (Business Chamber, SFG, Technova) and by active labour market policy focussed on vocational training</p> <p>Thriving spa resorts in the Eastern part</p> <p>High biodiversity, beautiful cultural landscape and a „green“ environment in most parts of the mountain and hill areas; high rate of organic agriculture in the mountain areas; well managed protected zones and a Nature Park (Pöllauer Tal)</p> <p>Environmental local action plans („Ökostadt 2000“, „Ökoplan Weiz“)</p>	<p>Links to rich economic regions are hampered by the geographical situation</p> <p>Relative disconnectedness of economic, technological and cultural development in Graz from the surrounding rural areas; higher vocational and academic skills are underrepresented there and migrate to Graz or even out of the region</p> <p>Relatively high unemployment rates in the periphery and among unskilled people; lack of workplaces for apprentices enforcing youth unemployment</p> <p>The opportunities lying in the orientation towards the South/East have not been exploited</p> <p>Dominance of low-skilled dependent workshops in the rural areas; decline of heavy industry and coal mining in West Styria; high telecommunication costs hamper telematic development especially in the rural areas</p> <p>Sharp decline of traditionally mixed, small and medium scale agriculture; reluctance to move to organic agriculture in the more intensive lowland areas and persistent lack of awareness of the opportunities in local product diversification in the rural „hinterland“ of the spas</p> <p>Industrial emissions in the Graz area (inversion climate), the Köflach-Voitsberg axis and in the Southwest (from Slovenia), traffic emissions and degraded living conditions along the Mur valley, parts of the Raab and the Feistritz valley (monoculture, traffic)</p> <p>Groundwater contamination, lack of biodiversity and erosion problems by high fertilization and pesticide use in intensive corn/pig and fruit production areas</p>
THREATS	OPPORTUNITIES
<p>Progressive ageing of the population and increasing dependency rate</p> <p>Rising xenophobia linked to fears of unemployment and criminality</p> <p>Dependent workshops (textiles and clothing, leather, industrial components) shift to low wage countries and leave people without employment</p> <p>Paper and pulp sector dependent on global ups and downs, food sector strongly under pressure by Common market competitors</p> <p>Agricultural monoculture in valleys (corn, pigs) and Eastern hill lands (fruit) will severely suffer from Agenda 2000, putting still more pressure on the environment, whereas less productive areas continue to get abandoned</p> <p>Tendency towards over-investment in the thermal baths sector</p> <p>Rising costs of infrastructure (road, supply, discharge) in scattered habitats (urban sprawl around Graz and the hill areas in the East)</p>	<p>Building upon rural vernacular and craft skills and the ability of rural people to organise mutual help in order to introduce sustainable technologies on a broad level (cooperative energy production and energy saving devices, self-made biological waste water sewage plants)</p> <p>Building up intensive links to neighbouring regions SLO and H (language skills, joint activities)</p> <p>Vocational training and higher education more oriented towards the needs of the rural population and connected to their skills and tacit knowledge in order to foster business creation and self-employment, often in combination with their part-time farming activity</p> <p>Faster railway links to Klagenfurt („Koralmtunnel“) and Vienna („Semmering-Basistunnel“) improving international market access</p> <p>Building up an industrial cluster of environmental and energy engineering; use of advanced technologies in eco-tech development</p> <p>Fostering local cycle economies based on local</p>

<p>Possible incident in one of the Slovakian, Hungarian or the Slovenian nuclear plants</p> <p>Increasing road transit on the international routes leading through the project area</p>	<p>resources (agriculture, forestry) and linked to the industry (wood processing, energy production, food processing, fiber production)</p>
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4.2.2 Innovative Courses of Action and Supporting Missions

Aims of the current most important innovative actions	Aims of the current supporting missions
<p>Local partnerships (mostly associated municipalities) support endogenous development; NGOs are active in international peace and ecology initiatives; traditional neighbourhood mutual help systems (e.g. in house construction) are still widespread and there is a great potential of „do-it-together“ strategies, especially in rural districts.</p>	<p>There are „citizen’s bureaus, one for Graz and one for the Land, providing assistance in a broad range of specific, mostly juridical issues and planning affairs.</p> <p>The financial instrument STEFREI (1985) promotes regional economic self-reliance by the development and stabilization of endogenous economic cycles, strengthening regional identity and consciousness, promotion of innovative forms of cooperation, and the improvement of the intraregional communication structures. The FER is a federal instrument with a similar objective. Now the methodology is taken over by the support for 4 LEADER II regions.</p>
<p>Lower Styria’s industry is based chiefly on the automotive cluster, other sectors are mechanical and electronic engineering, food, pulp and paper. The prosperous Graz region covers most of these activities, with a sub-center around Weiz; research and development of new technologies are centered around automotive research, energy and environmental engineering; the latter is promoted in partnership structures between the technical university, private research institutions, private firms and the city of Graz, which opened up the Austrian „Cleaner Production Center“ as one of the consequences of the successful ÖKOPROFIT eco-consultancy cooperation scheme; a scientific network - „SUSTAIN“ - located at the Technical University of Graz - is fostering regional sustainability. Recently there are growing border crossing initiatives in industrial development, agricultural and environmental issues with Slovenia; telematic projects are put up in urban and rural areas for entrepreneurial and administrative support. A rural telematic initiative (tele.ost) is running for thematically specialized telecentres.</p>	<p>The Business Chamber and the SFG (Styrian Economic Promotion Company for financial support and cooperation) are promoting technological improvement, business and technology parks, quality management and eco-audits among SMEs; „BAB“ (since 1996: Bureau for Training and Job Development) with offices in Graz, Leibnitz and Gleisdorf (WZ) is advising and supporting SMEs for qualification purposes. This activity is an initiative of the Styrian Labour Market Services (AMS), implemented by the ÖAR-Regionalberatung and funded by the ESF.</p> <p>Three regional managers in East/South/West Styria are linking local initiatives to public support and EU funding (they are controlled by a partnership built upon municipal associations)</p>
<p>Styria is leading in biomass district heating (Silberberg farmers school/LB) and thermic solar energy use („Arbeitsgemeinschaft Erneuerbare Energie“/WZ) promoted and carried out by private and communal initiatives. There is also a biodiesel station which processes used oil and lubricants (farmers cooperative SEEG in Mureck/RA).</p>	<p>There is an independent Land-based energy consultancy service for households and enterprises, and a „regional energy consultant“ in Kornberg (FB); he is responsible for supporting energy saving initiatives in the Eastern region; the solar collector self-build movement and private practitioners are supported by specific fundings, as well as communal biomass heating. The tariff for private energy has been raised.</p>

Aims of the current most important innovative actions	Aims of the current supporting missions
East Styria is the national production center for fruit, especially apples, and pork; agricultural diversification combined with short distance marketing and agritourism are common practice (thematic routes around wine, apples, castles), including rural tourism niche offers (like for handicapped people); organic agriculture is growing fast in mountain areas;	The Chamber of Agriculture is steering the ILE-programme for the implementation of the 5b-programme. The subsidies are promoting ecological measures (including organic agriculture) within the „ÖPUL – programme“ (EU reg. 3028/92). Diversification into agritourism and fuel production is equally funded.
Thriving spa resort in the East; growing awareness of tourism entrepreneurs in environmental management.	The „Styrian Tourism Ltd.“ is coordinating the regional associations on the Land level (Styrian Law on Tourism from 1992); the national ÖW (Österreich Werbung) is operating on the international markets; the offer is structured in specific „bundles“ (family vacations, horse riding in Austria, health hotels,...)
Local nature conservation initiatives (Lafnitz valley) and a municipal-supported nature park (Pöllauer Tal) ; citizen's movements in the last 20 years were mostly centered around ecological and space planning conflicts (highways and traffic problems, waste management, although citizen's movements seem to wither away in the last years.	The „Eco-programme 2000“ for Styria foresees an „Eco-fund“ as a financial tool for the „target areas“ man ,air, noise, water, soil and earth, waste and nature protection. The Land is subsidising ecological conservation measures in threatened areas.

4.2.3 Human Capital

- Population is progressively ageing, but remaining stable in the project area.
- Infectious diseases are low, but death rates due to heart diseases and cancer are still high in some areas due to environmental conditions (air, water), nutritional behaviour (smoked meat, wine) and stress (commuting, isolation).
- Citizens are ready to react against projects that threaten the environmental quality (traffic, waste):
 - Plabutschunnel in Graz
 - Graz cyclists movement
 - Anti-shredder initiative in Fehring (FB)
- Styria and the capital Graz set signals for international solidarity and sustainable development:
 - The Graz Agenda 21 programme and Climate Alliance Network („Klimabündnis“)
 - International „Bureau for Peace and Development“ in Graz
- Emergence of local partnerships for endogenous development
- Rural people's traditional mutual and self help system with a broad range of craft skills
- The legal framework for an „open society“ is getting improved:
 - Federal and regional laws obliging the authorities to give extensive information to citizens
 - Installation of a Regional Audit Court for controlling regional governments expenses
 - Regulation on incompatibility of public functions
- Services for advice-seeking or marginalized people:
 - Bureau for Citizen's Initiatives in Graz-town (1974)
 - Styrian Citizen's Bureau (1986)
 - Styrian Environmental „Ombudsman“ (1989)

- Communal work groups involving citizens in the planning process in Graz (in preparation of the City development concept)
- Assistance Bureaus for special target groups, mainly in Graz (women, children, immigrants, drug addicts)
- Qualification and active labour market initiatives:
 - ADAPT-initiative Bureau for Labour and Employment (BAB)
 - Employment foundations for unemployed or people whose workplace is threatened

4.2.4 Human-made Capital

- Rather consistent planning and programming on each level
- Opening of an „Embassy at the EU“ in Brussels
- Objective 5b programmes in rural border districts and an objective 2 programme in the old mining and industrial district VO.
- LEADER II programmes and action groups in 4 rural districts
- Participation in other structural fund programmes:
 - ADAPT (all districts)
 - SME (all districts except G, GU)
 - URBAN (G)
 - RECHAR (VO)
 - RETEX (NUTS III region East Styria)
 - INTERREG (all district except G, GU)
- STEFREI (Styrian promotion for endogenous development initiatives) as a financing measure for local development initiatives using a transsectoral approach (since 1986)
- The Land and Regional Planning Department within the Styrian Land government provides an advisory service for regions and municipalities in order to enable them to establish their own development programmes and guiding principles
- FER (Federal fund for endogenous regional development): A federal financing instrument with a similar objective, actually subsidizing consultancy and project start-up costs
- Industrial recovery based on the following clusters:
 - Car production, motor development (AVL: 3I-Diesel) with high interaction with regional supply and complementary services
 - Paper and pulp with high product quality and productivity
 - Engineering, especially in the energy and environmental sector
- Technological advancement fostered by networks between economic, scientific and administrative structures:
 - Close links between technical university institutes, extra-university research (JOANNEUM), the high tech sector of the industry and the administration of Land and Graz (e.g. STENUM Ltd.)
 - Cooperation between scientists, Land administration and local actors in order to create „sustainable cells“ (starting with the „ÖKOPROFIT“- consultancy to enterprises in Graz and the „ÖKOFIT“ - study for a cyclical economy in FB); „Ökopark“ Hartberg, „Innovationszentrum“ Weiz.
 - Researchers in Graz (TU) operating a scientific research network on sustainability (SUSTAIN)

- Technology park Graz-Maribor, based on the strength of cars and transportation, metal processing and engineering on both sides
- Total quality management (ISO 9000) and environmental management (EMAS, ISO 14000) play an increasing role Use of new technologies for regional employment
- Use of new technologies for regional employment
 - Wirtschaftsoffensive Voitsberg
 - Telestube Leutschach
 - "tele.ost" - telecentres in Markt Hartmannsdorf, Hartberg, Gnas and Kornberg
 - Informationsvernetzung Graz
 - Steiermarkserver
 - Tourism booking system
 - TELCOM (EMPLOYMENT-project for women and handicapped people)
- Industrial and SME support:
 - Business chamber and WIFI training and consultancy services
 - TECHNOVA - Innovation fair and cooperation exchange supporting SMEs in the introduction and utilization of new technologies
 - Federal funds for cooperation between scientific institutes and the private sector (ITF, FFF)
 - SFG (Styrian Economic Promotion Company) for innovation promotion, searching for international partners, business foundation and communal business parks
 - Regional management offices in the rural 3 NUTS III regions linking local initiatives to public support and EU funding
- Thriving initiatives in renewable energies
 - ARGE ERNEUERBARE ENERGIE (Gleisdorf/WZ), „Energierregion“ Weiz-Gleisdorf
 - Biomass - communal heating systems at municipal level (prototypes developed in the Farmer School of Silberberg/LB)
 - Regional energy agency (Kornberg/FB)
- Diversification of and support for farmers
 - Increase in organic agriculture especially in mountain and grassland areas
 - Direct marketing initiatives based on a regional association linking up with local tourism (Schilcherland/DB) or a product speciality (Styria-Beef, Weiz Lamb, Almo-oxen, Styrian fruit)
 - Fuel production for local cyclical economy
 - Agricultural Chamber for consulting and promotion, responsible for the implementation of the ILE - programme („integrated rural development“ as a part of the objective 5b plan)
 - Agricultural subsidies concentrated on environmental benefits („ÖPUL“: 20% of the subsidies, biofuel initiatives, other diversification measures and vocational training)
- New touristic offers building upon local resources
 - Agritouristic offers showing a strong interaction with local producers and endogenous traditions (apple route, flower route, several wine routes)
 - Renewal of the declining summer resorts in the North by organising and promoting new offer combinations for people seeking health and recreation holidays
 - Reconversion of an old mining district into a leisure and recreational site in VB (Maria Lankowitz, Bärnbach)

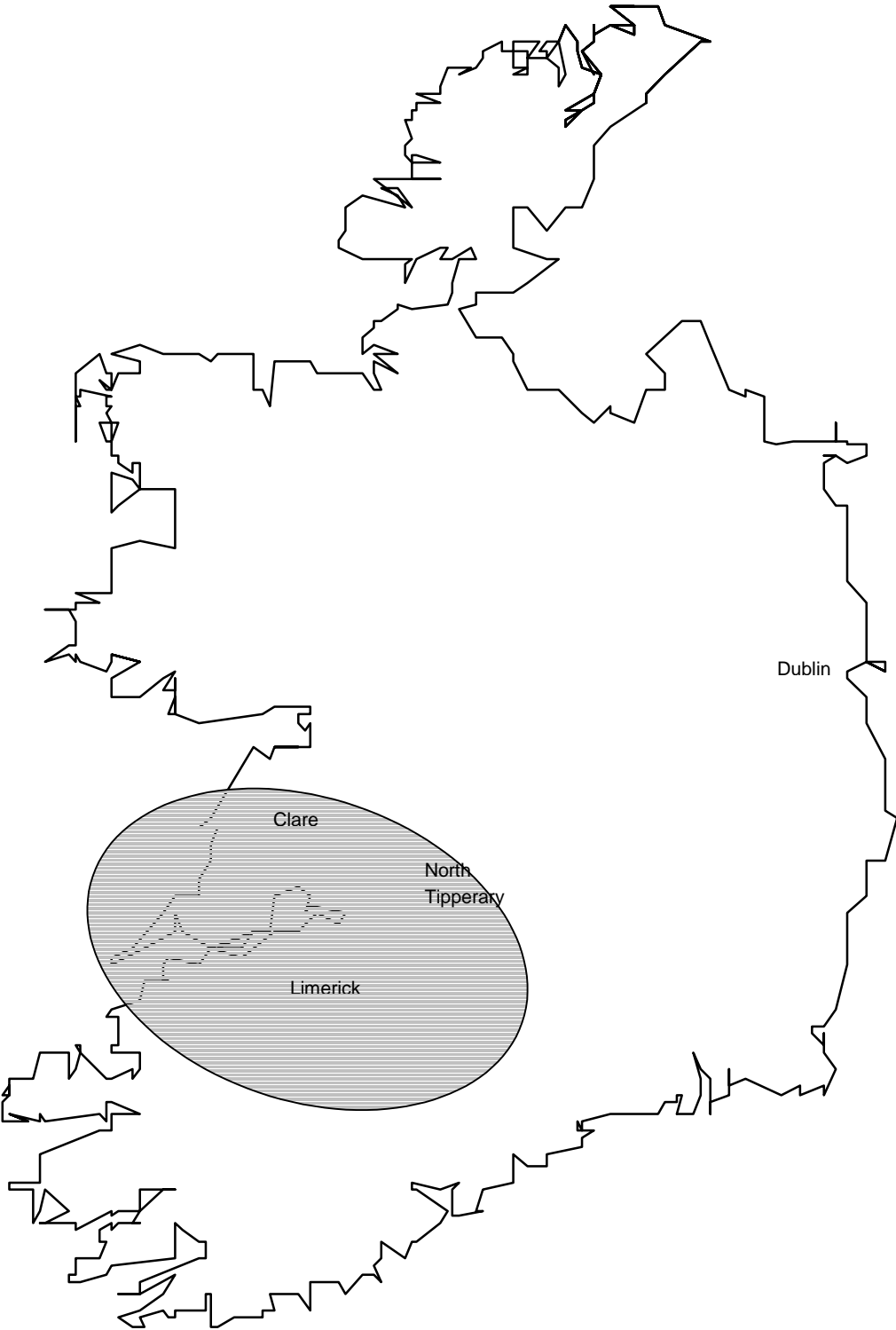
- Special offers for niche target groups (vacations for the handicapped in HB)
- Interregional cooperation via the castle route (with Burgenland)
- Thriving thermal baths cluster in the East
- Tourism promotion by the „Österreich-Werbung“ (ÖW) on the national level
- „Styrian Tourism Ltd.“ as an association of regional tourism boards on the Land level (promotion, coordination)

4.2.5 Natural Capital

- Maintenance of a cultural landscape rich in biodiversity and amenity values in less productive mountain and hill areas
- Landscape and nature protection
 - 20 landscape protection areas, 3 nature protection areas, 1 RAMSAR area (Lafnitz/HB, FF) and 1 nature park (Pöllauer Tal/HB)
 - Local and regional initiatives for listing and protecting important sites and mobilizing people's accountability (eco-cataster)
- Environmental local activities
 - Ökoplan Weiz
 - Agenda 21 plan in Graz (winner of the European Sustainable Cities' Award in 1996)
 - Climate Alliance activities in 62 municipalities
- Special initiatives for „greening“ the town of Graz
 - Communal energy concept
 - „Ökostadt 2000“ as part of the Agenda 21 programme
 - 30kmh speed limit in the town of Graz
- Legislative measures on the Land level
 - Styrian legislation for nature and species protection
 - Areas designated for the European „Natura 2000“ network
 - Ambitious „Eco-programme 2000“ for Styria serving as a financial instrument to improve the environmental situation in 7 target fields
 - Biotope preservation programme (BEP), funded by the Land to compensate land owners and farmers for environmental benefits in addition to the ÖPUL programme
 - Law for spatial policy created in 1994 in order to avoid massive land purchase for second home purposes
- Publications for raising citizen's and municipalities' awareness
 - Guide for Agenda 21 work on a local level (Federal Ministry of Environment)
 - Nature protection handbook (edited by the Land together with a large NGO in nature conservation („Naturschutzbund“))
- Support for energy saving initiatives
 - Special agent for energy planning (Landesenergiebeauftragter) on the Land level for shaping sustainable energy policy
 - Special fundings for energy saving on buildings and homes, solar collector use and communal biofuel cooperatives
 - Relatively restrictive regulation of business and domestic heating installations, waste disposal and waste water sewage

- Special tarif system within the „Grazer Verkehrsverbund“ fostering the use of public transport means in Graz and in Styria

4.3 Midwest Ireland



4.3.1 Analysis of Strengths, Weaknesses, Threats, Opportunities

Strengths

- In small town and rural areas strong local identity and social cohesion and reinforcement of identity through community development, social, sports, cultural and church activities; vibrant music tradition in Clare
- Entrepreneurial potential in high number of small farms and businesses
- Social entrepreneurship of middle class in founding and development of infrastructure, such as Shannon Development and University of Limerick, and also in dynamics of community development groups
- Third level education system in Mid West has stronger technological orientation than national system generally
- Regional Development Authority which created regional identity and initiated many developments
- Natural environment of generally high quality having diverse resources, including internationally important habitat (e.g.Burren)
- Large population of young people (in spite of ageing profile)
- Low national rate of inflation and relatively low lending rate
- Multi-annual programmes as a basis for strategic planning

Opportunities

- Increasing pressure for greater local democracy and autonomy; national Devolution Commission developing proposals
- Increasing but tentative innovative actions of farmers and community groups in agricultural product diversification and in production of speciality foods
- Increasing participation of women in labour force and in community development and social and cultural actions
- Increasing partnership between local community groups, social activists, NGOs and state agencies through Leader, ADM Area Partnerships and County Enterprise Boards to address local disadvantage and development
- Increasing awareness of environmental and architectural heritage, supported by REPS and urban and village renewal funding
- Availability of finance from EU Structural and Cohesion Funds
- Development of eco and higher quality tourism
- Potential of Limerick City -Shannon-Ennis axis as professional and infrastructural service centre
- Recognition of provision of innovation infrastructure
- Regional Authority coordinating certain public services

Threats

- Continuing emigration of young and educated young people
- Increase in criminal offences, spread of substance abuse to rural towns
- Fragmentation in regional and local infra-structures and weak regional and local democracy

- Low economic and demographic viability in small farms which tend to be located in more outlying areas equated with environmental quality
- High unemployment amongst population of public housing ghettos and underemployment in rural areas
- One third of population with incomes below poverty line (half of average income)
- Directionist attitudes of national industrial development agencies with weaker support to indigenous industry
- More widespread lower level pollution of river and lake systems and increasing pollution in Lough Derg
- Increased intensification by larger farmers to compete in liberalised market; actions to attain more just income from subsidies and grants by small farmers
- Inappropriate tourism development and activity in environmentally sensitive areas
- Decline in Structural Funds
- Divisive effect of in-migration of foreign „New-Age“ travellers etc.

Weaknesses

- High degree of centralisation of national administration and agencies and lack of autonomous decisionmaking by regional and local government and offices or representatives of national bodies
- Local government has no role in economic development
- Clientalist political culture but declining in face of growing sophistication of community groups
- Academic orientation of education system and weakness of vocational training
- Low indigenous industrial development and weak "context" for indigenous development
- Collapse of traditional industries in Limerick city and absence of indigenous clusters of manufacturing firms in the Region
- Domination of employment in foreign branch plants
- Academic orientation of the education system
- Declining level of investment in manufacturing sector especially in indigenous firms
- Weak rural infrastructure, continuing weakening of rural communities
- Overdependence of farming on beef and milk production; low farm incomes and investment capital of majority of small farmers

4.3.2 Innovative Courses of Action and Supporting Missions

Innovative Actions

- Community development groups are increasing in number and in scale of activity; Ballyhoura becoming both Leader company and a Area Partnership Board integrating national and EU initiatives in their strategies
- Leader, Area Partnership Boards and community development groups are fostering local identity, conserving heritage and promoting eco tourism
- PAUL Partnership Limerick brings together community groups in Limerick to address social deprivation in Limerick City

- Limerick Youth Services, a member of PAUL, has created a number of enterprises in Limerick City employing disadvantaged young people
- The Region is remarkable for the social entrepreneurship which led to the foundation of Shannon Development, the University of Limerick, Muintir na Tire (the [rural] community development association), the GAA (Gaelic Athletic Association) etc.
- Creation of an adjacent virtual business park by a local medical equipment company initiating a cluster of high skilled spin-off enterprises formed by employees
- Increasing non-fin fish aquaculture
- Creation of Irish Rural Link, a network of rural community groups
- Entrepreneurial development of speciality foods
- Formation of Limerick Civic Trust to conserve and restore architectural heritage in Limerick City
- Establishment of Tipperary Rural and Business Development Institute at the initiative of the Vocational Education Committees of Tipperary North and South
- Creation of locally elected Community Council in Scarriff, raising own funds to underpin partnership development activities with local authority

Supporting Missions

Organisation

- The Strategic Management Initiative of government to improve efficiency, quality of services and coordination throughout the public service including local authorities
- Proposals to create a three tier administrative structure below national government are being considered by the Devolution Commission.
- Regional Authorities were set up in 1993 to coordinate the physical planning and infrastructure of the local authorities in their area, to report on the social, economic and environmental status of their regions and to monitor without responsibility expenditure of EU funds in their regions.
- Responsibility for addressing social disadvantage, development of farm diversification, local tourism and small firms of under 10 employees has been devolved to Leader, ADM Area Partnership Boards and County Enterprise Boards under boards representative of community groups, state agencies, social partners and in the case of CEBs elected local authority and Dail representatives.
- Consideration is being given to formation of County Strategy Boards to coordinate the work of the Area Partnership Boards, Leader companies, County Enterprise Boards.

Education and training

- Restriction of the autonomy of universities is being considered.
- Regional Education Boards to manage the primary and secondary school systems are proposed
- Initiatives to tackle problems encountered by early school-leavers such as Youthstart and Breaking the Cycle programmes
- Support programmes to enable more women to participate in the labour force and community development

Development

- Funding under the National Development Plan 1994-99 and Operational Programmes agreed with the EU under the Community Support Framework and as may be modified under the mid-term review: within these
 - Adoption of multi-annual programmes as a basis for strategic planning
 - Adoption of the principle that development strategies must conform to the principle of environmental sustainability
 - Operational Programme for Local and Urban Development in support of bottom-up strategies and partnerships
- Shannon development offers a wide range of services and supports to industry, tourism and Leader, Area based Partnerships and community development groups

Social action

- Establishment of National Economic and Social Forum, 1993, brings together representatives of three broad strands, in order to engage in the process of public policy decisionmaking: the government and parliament; the traditional social partners, employers, unions and farmers; and groups traditionally outside the consultative process including women, the unemployed, the disadvantaged, people with a disability, youth, the elderly and environmental interests.
- Partnership 2000, the agreement between government and the social partners on pay, social and economic development targets, has as its second objective strategies for reintegration of long-term unemployed and those at risk of becoming so into the economic mainstream.
- Formulation of National Anti-Poverty Strategy by government

Environment

- Under the 1995 National Heritage Act, a 15 member Heritage Council has been appointed whose functions include proposing policies and priorities to conserve Ireland's natural and built environment.
- The Rural Environmental Protection Scheme will help alleviate some adverse agricultural effects as well as provide some income support
- Control of farmyard pollution programme.
- Support to urban renewal and conservation of architectural heritage by Urban Renewal Act and Operational Programme for Local Urban and Rural Development.
- The Environmental Protection Agency's requirements for Integrated Pollution Licences will help to control pollution from industry
- EPA State of the Environment Report
- Environmental regulations based on 'polluter pays' and 'pre-cautionary' principles.
- Limerick City is a pilot area for urban and community forestry.
- Proposed designation of Natural Heritage Sites under the proposed Wildlife Amendment Act by the National Parks and Wildlife Service
- Scenic Landscapes Project under the EU Life Programme undertaken by Bord Failte and An Taisce, a pilot project to develop methodologies to promote sustainability.
- Networking between NGOs and local authorities in Ireland and overseas in promotion of Agenda 21.
- National Sustainability Strategy adopted by government, April 1997.

4.3.3 Human Capital

Organisation

All aspects of administration and infrastructure concerned with economic and social development are highly centralised in government departments and agencies other than the universities which have considerable autonomy. The Mid West region comprises three counties, Clare, Limerick and Tipperary North and one county borough, the City of Limerick. Each has a Council of elected members, with certain strategic, finance, and planning functions and with other functions the responsibility of the county manager, as the executive of the central Department of the Environment. Local government tends to be underfunded. Proposals to extend the authority of the councils including a limited economic development and employment creation roles are under consideration by government. The function of the Regional Authority, established in 1993, is to coordinate the provision of certain public services and monitor expenditure of EU funds. The committees are representative of elected local authority members, government departments, social partners and voluntary bodies. The region has the only regional development agency in Ireland, the Shannon Free Airport Development Co, known as Shannon Development, with a wide mandate for industrial and tourism development.

Demography

The population of 317.000 lives within an area of about 7,000km, a density of 45 persons per sq km. One third live in the Limerick City-Shannon-Ennis axis. The population was in continuous decline through emigration from the 1840s until the 1960s. A further surge of emigration occurred in the 1980s. A falling fertility rate reinforced by emigration of younger age groups is causing ageing of the demographic profile, which however remains relatively young compared to most European countries. Emigration and ageing are significant in sparsely populated and extensive areas such as West Clare. Population growth and the rate of natural increase has been lower than the national average and net migration rates higher. Unemployment at 10.6% is less than the national, particularly in Limerick city. There is significant underemployment on small farms. 80% of farms are not economically viable and depend on transfer payments. 1/3 of the total population is below poverty line; this is linked to a rising rate of vandalism, criminal activity and drug and other substance abuse. The latter is spreading to rural towns and villages.

Health

The health care infrastructure of the region is just about adequate but rationalisation has led to some access problems. Some specialist facilities are located only in Dublin. Death rates are higher than the national average, a characteristic associated with a higher age profile in more rural areas. Causes of death are, in ranking order of main causes, cardiovascular disease, cancer and accidents. On the other hand, in public health terms, there are generally high levels of environmental standards.

Culture and education

The deep respect for education and learning, both for their own sakes and as a passport to advancement, common to the rural west of Ireland, results in a higher proportion of school leavers than the national average undertaking third level education. The education system is academically oriented but the new (1970s) University of Limerick as well as the Regional Technical College have higher proportions undertaking engineering and technology related courses, leading to a higher proportion finding employment on completing primary degrees. There is little vocational training of an acceptable standard, even though skills shortages have been identified as a constraining factor. Within a overall cultural identity common to the west of

Ireland and shaped by tradition and religious belief, the region has a diversity of cultural characteristics associated with gaelic games, music, dance, community self help and cooperation and respect for the natural and inherited environment. The rural areas and their small towns have strong kinship and social inter-relationships. Emigration and immigration of branch plants and foreign nationals including those seeking an alternative lifestyle creates tension between traditional values and imported ones.

4.3.4 Human-made Capital

Economy

Per capita GDP was 94.5% of the national average in 1991, the third highest regional figure. National per capita GDP rose by 30%, 1991-1995, a rise in which the Mid west has participated. The labour force, 1991-1995 has increased by 2.3% a growth lowered by emigration, and the workforce by 8.7%. Unemployment has declined to 14%. Manufacturing employment has grown by 38%, services employment by 8%, but part time employment has also increased. Employment of women is increasing at a faster rate than that of men. Agricultural employment declined by 18.5% but there is significant underemployment.

Built environment and transport

Limerick city as well as towns and villages such as Ennis have seen decline and degradation of their centres. Private and public (including Shannon Development) initiatives and central government incentives have led to considerable urban renewal and architectural heritage conservation. There has been considerable investment in public and private housing, especially in the corridor suburbs south of Limerick City and in the Limerick-Shannon-Ennis axis where branch plant location is high. Rural housing has also improved significantly but there are considerable problems with the public housing stock in Limerick City..

Passenger and freight transport is predominantly by road and given a weak public transport system there is high dependence on the car in rural areas. There is a high ratio of paved road per capita. Primary roads have been improved considerably with the aid of structural funds but secondary and minor roads are generally of poor quality. The international airport at Shannon has scheduled flights to the UK, the US and mainland Europe, and non-scheduled flights to Europe and other destinations but is constrained in further development of frequencies and destinations. There are rail connections to the north, Dublin and the south. Limerick port is the third largest in the country and rivalling Dublin in throughput. An alumina smelter and the country's largest power station are located one on each side of the Shannon estuary.

Agriculture

Agriculture employs 14% of the workforce mainly on small uneconomic farms. Production is concentrated in beef and dairy. Land quality varies from the Golden Vale with good grassland to lower quality in much of the Region. Diversification is relatively low, and mainly in tourism related activities and some food products.

Manufacturing

59% of employment is in 89 foreign firms concentrated in standardised production of electronic/computer based equipment, generally demanding low skills and costs. Indigenous firms, numbering 443, have a high rate of closure and very slow growth in employment and have no particular concentration of sector, other than the food firms of Tipperary North. Foreign

firms have been less volatile in the 1990s. There are industrial zones and a business park adjacent to the airport and small business startup premises in a number of locations.

Technology/innovation

The infrastructure consists of the National Technological Park and Innovation Centre adjacent to the University, and Food and Wood Technology Centres, all established by Shannon Development. In Limerick-Clare, 55 firms carry out R&D, 14.6% of national expenditure; the foreign company share is 92%, and most is internal incremental improvement. 16% cooperate with the HE sector. In Tipperary most R&D is in largely indigenous food firms. Shannon Development offers R&D grants and venture capital

Tourism

Shannon Development placed an early emphasis on tourism development and took a diverse range of initiatives. Tourism has been a major target of local development groups and Leader companies, with notable success in the Ballyhoura area. Since tourism became a national and EU supported Operational Programme priority, there has been steady growth but less than that of neighbouring western regions. There has been considerable investment, especially in farmhouse, B&B accommodation and hostel accommodation. Tourism development is concentrating on higher quality and eco tourism.

4.3.5 Natural Capital

Soils

Only 3% of land is suitable for crop production. Over 90% of land is used for grazing and production of hay and silage.

Natural and semi-natural environment

There are extensive and highly varied landscapes with generally low levels of pollution and containing habitats and landscapes of international importance, e.g. the Burren. The main threats are inappropriate tourism and agricultural development. Nature conservation policy is poorly developed with designation as the main instrument. The 1976 Wildlife Act (due to be amended) whilst adequate in theory is ineffective in practice because it is difficult to protect fauna and flora outside state owned land, agricultural practices such as drainage and reclamation having derogation. National Parks and Wildlife Service have inadequate resources.

Waste and discharges

Litter and dumping are two of the most visible and damaging waste problems. The Moneypoint coal burning power station is a main but diminished source of SO₂. The main source of air pollution is motor traffic, but not to serious levels, the main concentration being in Limerick City. Sewage treatment facilities are improving. Management of waste by landfill is a problem.

Water

65% of river length is categorised as unpolluted, a decreasing amount, but there is a spread of lower level pollution. The rise in pollution of Lough Derg is serious. Agriculture and industry are the main causes of pollution.

Drinking water quality is not satisfactory in some areas.

Sea water bathing quality is generally very good.

Forestry

4% of the land area is devoted to forestry and 95% of trees are spruce and pine, planted by the state forestry service. Private and farm forestry is increasing and forestry especially broadleaf plantation is a potential source of alternative farm income.

4.4 Toscana



4.4.1 Analysis of Strengths, Weaknesses, Threats, Opportunities

Strengths

- Different Tuscanies in Tuscany nourished by a strong sense of local community and mutual help with an important economic and social role played by local systems of SMEs (e.g. industrial districts)
- Co-operation, partnership and networking between SMEs, local and regional authorities, voluntary sectors, social interest groups
- Orientation of regional and local authorities and communities towards federalism, regionalism and subsidiarity as a result of the historical and cultural identity tradition, and of participation in programming regional and local policies
- Recent regional laws which introduce procedures according to the above principles in order to co-ordinate sectoral policies and to promote some elements of environmental and sustainable development (e.g. improvement in PRS - regional development programme - based on a territorial articulation of strategies)

Threats

- Increase in unemployment (especially young, women and long term unemployed) with risk of depletion of human capital and aspects of social instability (e.g. rise in micro-criminality, organised crime, drug trafficking)
- uneven socio-economic development between the provinces
- fragmentation in organisational systems (social, entrepreneurial and institutional) and in procedures (e.g. overlapping and confusion within national and regional legal frameworks) with the risk of centralisation and over bureaucratisation
- Financial problems due to state budget deficit and to the very low level of autonomy in regional budget and taxation

Weaknesses

- Demographic change and perspective (e.g. ageing of the population)
- Environmental impact of traditional patterns of production (e.g. manufacturing, agriculture), transport and services; the most relevant are a certain loss of biodiversity (especially marine species), water and air pollution (main rivers, some coastal waters, some cities), erosion (especially of the coast), industrial and urban waste, energy consumption, dangers to health
- Decrease in the role played by agriculture and industry along with a general difficulty of the SMEs to face the post industrial era (e.g. slow diffusion of innovation);
- Low level of decentralisation and imbalance of competences which give as a result a continuous conflict between the State, the Region and the local authorities.

Opportunities

- increase in the awareness of the environmental problems amongst regional and local actors and the population concerned (e.g. quality of food, natural cooking, alternative medicine, urban and country life)
- more environmentally friendly types of production and consumption emerging in agriculture, energy, tourism, transport, daily life

- emerging sectors as new sources of employment such as the environment, technology, cultural heritage, social services
- innovative objectives in basic regional policies (e.g. spatial planning, technology, the environment, tourism, agriculture)
- current national and regional proposals in favour of regionalism and federalism

4.4.2 Innovative Courses of Action and Supporting Missions

AIMS OF THE CURRENT MOST INNOVATIVE ACTIONS	AIMS OF THE CURRENT SUPPORTING MISSIONS
to utilise and to increase the value of historical and cultural heritage	to foster regional cultural identity, economic and social cohesion through inter-local and inter-regional co-operation within the European Union, (e.g. the project "Medieval Tuscany - the Francigena Way")
to develop sectoral information systems, telematics and multimedia technology, styling and design; to develop and to certify high quality of new products, processes and materials in industry, and agriculture; to improve co-operation between agriculture, industry and research	to integrate, co-ordinate and promote research and innovation involving businesses, research bodies, universities, local authorities in a virtual scientific/technological park (e.g. the regional network of high technology - RRAT) which includes also environmentally sustainable projects
To foster partnership and networking between: SMEs, co-operatives, craftsmen, local authorities, etc.; local industries and abroad	to empower local authorities, to foster decentralisation, participation and co-ordination according to the principle of subsidiarity and cohesion (e.g. the regional law on a new system of local autonomy)
<p>to improve the ecological aspects of production and daily life, e.g.:</p> <p>the monitoring of the environment, climate and traffic;</p> <p>the change of fuel to natural gas and electric energy in transport;</p> <p>local traffic plans with forbidden zones, bicycle routes, etc.;</p> <p>geothermy, energy plans, biomass, wind and solar energy;</p> <p>the eco-renovation of abandoned mining areas and degraded landscapes as well as the development of areas with significant natural resources, cultural heritage, artisanal knowledge, etc.;</p> <p>the protection and the creation of natural areas and parks;</p> <p>agriculture organic farming;</p> <p>integrated forms of tourism with the environment and the cultural heritage;</p> <p>campaigns to involve the population in cleaning rivers, towns, etc.;</p>	to promote and diffuse environmental policies by means of regional laws (e.g. environment impact assessment, land use and spatial planning, water system), plans (e.g. regional environmental plan, regional energy plan, environmental projects in agriculture and forestry) and agencies (e.g. ARPAT for the environmental protection, REA for the energy, ARSIA for the agricultural and forest sectors, ARRR for resource's recovery)
to improve social and health services in which an important role is played by voluntary organisations and self help groups; to create centres for alternative medical and non-medical health	<p>to foster (by means of various regional committees, laws, plans):</p> <p>cultural, social and health services;</p> <p>support and help to families, people at risk of marginalisation, immigrants, etc.;</p> <p>the voluntary sector;</p>

AIMS OF THE CURRENT MOST INNOVATIVE ACTIONS	AIMS OF THE CURRENT SUPPORTING MISSIONS
to develop local initiatives to combat unemployment and social marginalisation by means of social, professional and individual guidance, training (tele-training), incubators, employment and enterprise creation, self-employment, development of new sectors (the environment, culture, social services, tourism, etc.), socially useful temporary works, social, financial and technical help, etc.	to elaborate and implement active labour policies in a democratic and participatory way by means of agreements with the social parties (e.g. the "development and employment pact" between the Region, the trade unions and the employers' associations), regional laws and plans (e.g. equal opportunities women-men, vocational guidance and training, job and enterprise creation, local employment initiatives, BIC and other local agencies, forms of venture capitals etc.) and specific projects (e.g. the creation of a regional network of guidance services)

More Details about Innovative Courses of Action

WHAT

- A. **VOCATIONAL GUIDANCE LABORATORY** (LABORATORIO per l'orientamento): creation of a regional network of the vocational guidance services; transformation of current structures and practitioners into integrated multi-services centres and operators. The project started in 1995.
- B. **REGIONAL NETWORK OF HIGH TECHNOLOGY** (RRAT): to integrate the initiatives coming from the three poles (West, Central and South) of the network; co-ordination and development of research, businesses and institutions; creation of a virtual scientific/technological park. The project is the implementation of a main objective of the 1992 PRS.
- C. **NEW SYSTEM OF LOCAL AND REGIONAL GOVERNMENT**: to improve autonomy, decentralisation and co-ordination according to a 1995 regional law based on the principle of subsidiarity.
- D. **DEVELOPMENT AND EMPLOYMENT PACT** between the Region and the social parties (the trade unions and the employers' associations): to elaborate and implement active labour policies in a democratic and participatory way. The agreement was reached in August 1995.
- E. **NEW SYSTEM OF ENVIRONMENTAL MANAGEMENT**: to promote and diffuse environmental policies by means of laws and agencies, many of them approved in 1995.

WHY

- A. fragmentation of initiatives and services concerning vocational guidance, training, placement, etc.; conflicts between State and Regions as regards responsibilities on labour policies.
- B. fragmentation of and imbalance between supply and demand in scientific and technological knowledge; inadequate technological and innovative capabilities of businesses within advanced scientific areas.
- C. the institutional gap in the Italian system; the imbalance and conflict of responsibilities between State - Regions - local authorities; the democratic experience of regional government since its constitution.
- D. see A and C
- E. as a result of the past patterns of industrial development, many issues are nowadays conflicting with the environment, especially in areas which form the bases of the economic regional fabric (i.e. local systems of SMEs, industrial districts); since the end of the 1980's,

an increase in environmental consciousness and a growth in the role of environmental interest groups.

HOW

- A. transformation of current structures; training of operators; experimentation of innovative methodologies; creation of working teams; selection of priorities, etc.
- B. synergetic approach to combine five operative fields (agriculture, the environment, cultural heritage, traditional industry, biomedical - pharmaceutical products) and seven technologies (bio, multimedia, robotics, space, advanced instruments and materials, informatics and telematics); 12 virtual organisations which co-ordinate expertise, knowledge and skills coming from local aggregation in the above topics.
- C. in two years time (1995/1997), more active administrative functions, financial resources and autonomy will be given to the local authorities within orientation, co-operation and co-ordination by the Region.
- D. scheduled meetings to monitor the pact implementation and the improvement of its topics which include the development of: local systems of SMEs, industrial districts and agricultural areas; capital market; guidance and training; employment services; flexible working time and job opportunities; equal opportunities for women as well as initiatives targeted to long term unemployed, young people, immigrants and people at risk of social marginalisation; self-employment and entrepreneurship; local employment initiatives especially in the sectors of the environment, cultural heritage, tourism, social services and agriculture.
- E. a complex system based on: the Regional Environmental Programme; the regional Agencies for the environment (ARPAT) the energy (REA), the resources' recovery (ARRR) and the agriculture development (ARSIA); the regional laws for EIA (environmental impact assessment), land use (spatial), control over the water system, water, air and urban quality, whilst new laws and plans concerning energy are under elaboration.

WITH WHICH EFFECTS

- A. still in progress; roughly 70 practitioners and local agents involved; focus on client satisfaction, total organisation quality and total person quality; improvement in competitiveness, co-operation, local development; a consensus emerges to a shared vision.
- B. still in progress; at the moment more than 300 projects are under examination demonstrating an increasing consensus from university, business, local authorities; up to now 9 projects have been financed.
- C. intense actions to implement the subsidiarity system are still in progress with the active participation of the local actors; the new institutional powers are implemented in a complex re-organisation of local bodies and of the relationships between public and private agencies.
- D. they are expected in many fields (i.e. see A) and a first scheme was approved by the Region to support the promotion of local initiatives of enterprises and job creation (see above).
- E. nowadays there are more instruments than before to deal with the environmental problems; also by means of these instruments awareness of and sensitivity to the environment is increasing in many sectors.

TOWARDS A NEW VISION OF THE FUTURE

From the characteristics up to now analysed and the above courses of action, some common elements and lessons arise which:

- together, represent a complex system which contains a set of principles such as subsidiarity, diversity, equity, partnership and networking, global thinking + local acting (glocacity), participation, the combination between environment, economy, technology, education and culture, etc.;
- stress the importance of an overall fluidification of horizontal and vertical co-ordination, external and internal coherence of decisions and decision making, whilst de-centralisation, autonomy and responsibility should empower local authorities and actors as the result of the combination between bottom-up and top-down approaches;
- stimulate and promote the synergy between endogenous resources and the resources coming from regional programmes to support local development;
- underline that the methods adopted can foster and support the elaboration and the implementation of active policies; however, these practices are not easily transferable from one place to another and, even though regional programmes are locally orientated, they do not have the same chances to succeed everywhere.

4.4.3 Human Capital

- progressive ageing of the population
- decreasing trend in the cases of infectious diseases
- recent increase in cases of viral hepatitis and AIDS
- increase of deaths from tumours, especially in the respiratory system (e.g. enquiries have shown a direct correlation between atmospheric pollution and tumours of the lungs)
- increase in alternative medicine (homeopathy, acupuncture, shiatsu, etc.)
- often trace of pesticides and additives in food due to their use in agriculture and food industry
- increase in the awareness of the importance of food quality with the increase in natural cooking (e.g. macrobiotic, vegetarian, Mediterranean diets)
- decrease in the average family size, resulting in more emphasis on care of old people and children
- shift of the concentration of population (from chief towns and large urban centres towards small urbanised areas) and less clear distinction between work time, family and leisure time as a result of the change in organisational systems, technology, economic and social activities
- slow increase in immigration, above all from outside the EU, whilst emigration is clearly stopped; integration of the newcomers is not so easy, since this phenomenon is a new one for many local communities
- improvement in education; the main increases in university discipline have been in the study of economics, law and political sciences, even though the share of engineering is high
- increase in unemployment and activity rates, whilst employment rate is roughly stable
- increase in the number of long term unemployed

- increase in women participating in the labour market (activity, unemployment and employment rates) even though equal opportunities between women and men are not fully applied
- increase in the independent employment rate
- increase in employment related to the service sectors while it has decreased in industry and heavily in agriculture
- increase of open-ended employment contracts, work-training contracts and temporary works
- improvement in vocational guidance and training
- improvement of knowledge related to the areas of cultural heritage, socio-cultural innovation and multimedia
- recent re-orientation of employment to areas connected to the environment, technology and social services; they are interrelated and their influence is exerted on all the traditional sector (primary, secondary and tertiary)
- decrease in the overall income from subordinate work due to an overall reduction in jobs available and work possibilities, the policy adopted to restrain salaries and to reduce the national debt; nevertheless disposable income for the inhabitants in Tuscany is superior to the average Italian, although it is the lowest in the developed areas
- slight increase in the average propensity to saving
- rise in micro-criminality, crime against property and public standards (e.g. fraud), drug trafficking

4.4.4 Human-made Capital

- different Tuscanies in Tuscany
- increase in partnership and networking between business (e.g. SMEs, crafts, co-operatives), local and regional authorities, voluntary sectors, etc.
- emerging sectors such as telematics, multimedia, the environment, high technology, utilisation of cultural heritage
- change towards post industrial economy with globalisation, international competition, de-industrialisation and growth in service activities, information technology, etc.
- decrease in agricultural and industrial GDP, while it increases only in services
- difficulty of the SMEs which characterise the regional economic fabric to face the post industrial period because of the lack of innovation in products and processes and the slow diffusion of innovation; even though they are dynamic and rich in micro-innovation, they cannot afford the great amount of investment necessary in innovation and information of a large scale (both in products and processes) nor to foster their rapid diffusion
- imbalance between supply and demand in scientific-technological skills
- difference between: a) small traditional businesses which may be also advanced technologically; b) medium-large businesses - which operate in sectors with medium-high technological content, or in traditional sectors where they act as leaders to smaller companies which supply them; c) businesses operating in high technology areas, usually fairly small and having developed recently in relation to large hi-tech companies or research centres
- existence of advanced businesses, localised in three areas which have specific hi-tech sectors and form the regional network of high technology (RRAT): West Tuscany pole (Pisa,

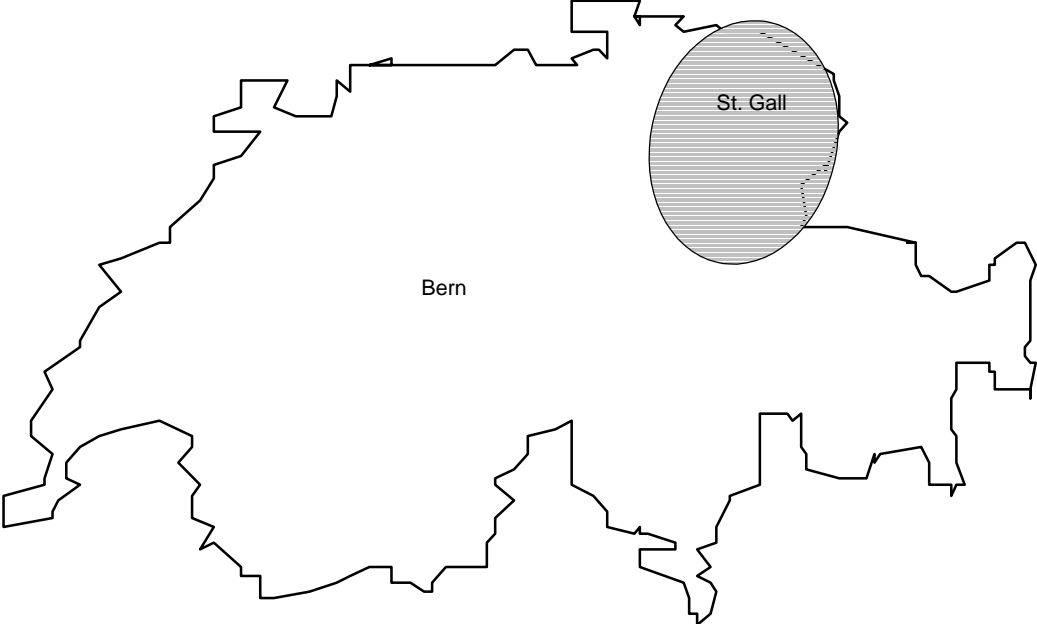
Massa Carrara, Livorno, Lucca); South Tuscany pole (Arezzo, Grosseto and Siena); Central Tuscany pole (Firenze, Prato, Pistoia)

- decrease in agricultural businesses but not in production
- high quality sectors (oil and wine production), floriculture and industrial cultivation;
- emerging non-food agricultural sectors, in particular the production of energy (combustion oils), the production of non indigenous fibres, the cultivation of species with active principles and/or essential products, organic farming
- medium fertility of the average soil quality with a low percentage of organic content
- high presence of pesticides and antiparasites in areas with specialised cultures
- pollution phenomena are evident in areas with intensive mono-culture as well in some lakes and rivers; some case of irrigation problems
- reduction in the forest area
- increase in erosion in mountain areas
- difficulties of the traditional businesses to respond to the change in demand of tourism, in which the foreign component remains very important; the main supply structures are concentrated in a few traditional tourist areas even though tourism represents a strategic sector for Tuscany
- increase in new forms of tourism (e.g. agricultural, naturalistic, environmental) which prefer small centres to the congested tourist areas;
- increase in the arrival of large companies from abroad (e.g. international financing groups) which represent a risk to the autonomy of small endogenous tourist operators;
- transformation of country homes to homes for non-agricultural uses (e.g. holiday) which has led to a change in the traditional and natural organisation of the territory
- increase in services (recently also for the environment) with some well equipped sectors (e.g. credit and insurance); in others fields (e.g. business services) there is a mixture of traditional forms (e.g. sectoral associations of employers) and new ones (BIC, incubators and agencies); a relative decline in others (e.g. commerce and public services); in some areas activities are overprovided by very small businesses (e.g. commerce and freight road transport); social services involve public authorities and the voluntary sector;
- increase in energy consumption due to transport and households while it is stationary in agriculture and slightly declining in industry
- increase in energy production import and in the utilisation of gas and renewal sources (e.g. hydro, geo, biomass)
- increase in demand of transport with construction of road hard infrastructures
- increase in the role of road transport, while coastal shipping and rail are decreasing in importance
- high level of congestion and pollution, especially in areas with high concentration of road infrastructure (e.g. Firenze, Livorno, Pisa)
- existence of dangerous points and infrastructure in which road accidents are concentrated
- more controlled growth in urbanisation in respect to other Italian regions; Tuscany is historically characterised by its distribution of population in many small and medium towns which transformed the regional territory into a poli-urban fabric with a close network of productive and residential areas; two large metropolitan areas exist (Firenze-Prato-Pistoia and Livorno-Pisa-Pontedera) while the rest of the territory is typified by single urban centres surrounded by countryside (e.g. Siena, Arezzo, Grosseto)

4.4.5 Natural Capital

- existence of anthropic effects within an overall harmonious environmental balance; the events with an anthropic component are dominated by forest fires and large scale industrial pollution
- relevant loss of biodiversity in marine species in the wetland areas, while a general reduction in the biodiversity in other environments has not occurred (e.g. the re-immission of several species that had previously disappeared; the increased amount of protected areas in the territory)
- pollution in the main rivers and in some coastal waters
- erosion of the coast and effects of urbanisation in littoral coastal areas
- pollution related to high urban traffic levels in some cities;
- problems of industrial residual waters (e.g. industrial districts) which were partly resolved with the construction of treatment facilities
- slightly increase in the reuse of waste and residuals (toxic and industrial) which are largely treated within the region
- existence of risk - industry sites
- main problems in land use regarding future sites for the landfill and recycling facilities
- removal of inert material from river or mountain areas which has caused and will continue to cause a deterioration of the regional landscape
- cataclysmic events of natural origins which are connected to flooding phenomena and related to rare geodynamic events
- existence of problems related to the super specialisation of species and intensive agricultural practices in some areas

4.5 Ostschweiz



4.5.1 Analysis of Strengths, Weaknesses, Threats, Opportunities

Strengths

Protection of Nature:

Diversity of landscapes, social and political activities for conservation, water resources, handling waste and sewage, subsidies and special levies and fees

Agriculture:

agricultural tradition, regional products and marketing, general importance of farming, promotion of alternative agriculture and processing of goods, local markets and fairs

Forestry:

wealth of forests, landscape, structure of forest ownership, traditional mode of architecture

Tourism:

landscape, traditions and culture in the mountain area, international cooperation, infrastructure (health tourism, hiking), cableways/rack-railways

Built and urban environment:

quality of life, urban life in agglomeration of St. Gall, density of settlement, cooperation in infrastructure, traditional character of villages

Technology and Innovation:

virtual factory, Electronic Mall Bodensee, centers of technology, university, industry fairs, international cooperation

Opportunities and Threats

- Tourism use, intercantonal cooperation (water), structural change in agriculture, production of alternative energy, land-use and topography, quarrying of gravel
- maintaining the protective functions of the mountain area, small farms, supplementary income, restructuring according to WTO, lack of skills for secondary occupation
- promotion of an endogenous economy, wood as resource (manufacturing, energy), supplementary income, natural functions
- cultural events, new agricultural functions, air pollution (commuting), lack of added value in one-day tourism, capacity limits, dependency from seasons, new kinds of sports disturb ecological balance
- decentralized structure of settlement oriented towards regional center(s), transport policy and urban planning, local demographic structure in the city of St. Gall
- cooperation between university and economy, cooperation with the European Union in research programmes, regional virtual market place, subsidies, alternative energy

Weaknesses

- Intensive agriculture, dispersed settlement creates traffic, circulation of air (city of St. Gall)
- quality of soils, mountain climate, quantity of organic fertilizer, lack of land ownership and investments in buildings
- lack of cultivation, damages caused by browsing animals, topography, low priced timber
- transport problems, partly quality of services (accommodation, catering), competing patterns of land-use
- pressure on landscapes, commuting, social fabric and housing costs

- industrial structures, lack of quality commercial services

4.5.2 Innovative Courses of Action and Supporting Missions

Innovative Action

Agriculture and forestry

There are different approaches to cooperate and improve the endogenous value added by linking the area of primary production with other branches. A new trend in commercialization are the 'farmer-markets' which allow the producers to sell their agricultural goods directly and at better prices. Two new public-private partnerships try to increase the regional economy while combining agriculture, crafts and tourism. The privately founded association 'Pro Specie Rara' with its European spinoff 'SAVE' is aimed at maintaining the genetic diversity of indigenous agricultural species and the local knowledge of cultivation. A traditional activity is the voluntary community-service work to clear the alpine pastures from waste and bushes. The 'wood-chain Appenzell' attempts to bring together all the people who grow, sell, distribute, commercialize and manufacture wood and related products. It aims at building a network along the chain of added value in order to better use local resources and to open up new markets.

Technology and innovation

A new venture is the 'Virtual Factory', a crossborder cyber network among 14 firms with employment between 16 - 7000 people. They specialize in machines, electronics or engineering and contribute different core competences to the network. Changing cooperations between these firms work on a temporally limited contract before continuing in other business again. Different institutes at the University of St. Gall coach and partly initiate such projects like the Virtual Factory and the Electronic Mall Bodensee. Several institutions of technological and technical education jointly edited a guide of courses and events. An on-line data base on technology has been established in the Regio Bodensee. Most of these examples combine innovative actions and supporting missions; they create a milieu which is able to support new technologically oriented enterprises.

Protection of nature

The region has been the starting point for the foundation 'Pro Specie Rara' which is mentioned above. The working group 'Association of Nature' is a co-operation of six regional associations for nature protection. The association 'Pro Riet Rheintal' is actively committed to the protection of flora and fauna around the Rhine's wetland in the Alps valley. In the Regio Bodensee an international foundation exists as a cooperation of the different ecological NGO's around the Lake of Constance. The foundation tries to promote the region as an ecological 'model' and started a big project called 'Sustainable Lake of Constance'.

Energy

The 'Appenzell's Association to Promote Renewable Energies' initiates and supports 'self-help groups' to construct solar devices; both cantons of Appenzell now have the highest utilization rate for solar heated water in Switzerland. In 1995 they built their first wind power station. To finance these activities they sell 'sunshares', the price of which is determined according to the use of energy of the buyer. Also some formerly industrially used hydro-electric power plants became reactivated by private initiatives.

Economy

To strengthen the impacts of regional trade fairs many communities established local exhibitions of manufacturing firms. The Swiss Research Institute for Small Business and Entrepreneurship at the University of St. Gall has a strong continuous cooperation with regional firms and entrepreneurs. In St. Gall a private institute was founded which promotes courses for young entrepreneurs in cooperation with the cantonal department of economics.

Culture

There exists a variety of events sponsored and organized by private groups. The city of St. Gall is the center for 'high quality' as well as 'alternative' cultural events and institutions whereas the mountain regions have a rich and living traditional cultural life based on a lot of private organizations and associations. One of the most famous events of the region is the Open Air Festival St. Gall. In the mountain region twenty promoters work together in a 'conference to jointly promote culture'.

Tourism

In the mountain area some 'theme trails' for hiking and a route for mountain-biking has been established. The regional suppliers of tourist services in the mountain area developed a common strategy of marketing and run a common electronic system for information and reservation. The owners of the mountain cableways published a book with hiking trails in the region.

Urban planning

Architects in eastern Switzerland cooperate to improve the urban planning processes. The associations for the conservation of nature and cultural heritage take care of the cultural heritage. In the mountain region a private association tries to support the public discussion on topics of urban planning with public relations work and special publications.

Politics in general

In the last few years intense public discussions took place about new cantonal constitutions and changes in the political processes in the three cantons. The discussions also stressed the historical division of the both Appenzell's and the 'rally to vote' of all citizens as a traditional element of direct democracy. The struggle for women's rights to vote and to stand for election, successful only at the turn of the 80s, led to a respectable success for women in recent elections.

Supporting Missions

General laws and statutes

The strong federalism in the Swiss political structure needs a well balanced system of financial distribution which is now being reformed. In some Swiss laws (especially the laws on the protection of forests, of rivers and lakes and the law on spatial planning) goals are formulated which can support the concept of sustainable development. The law on agriculture and some connected concepts make a paradigmatic change from an orientation towards the agricultural production to an orientation towards the cultivation of the non-settlement-area. The new law on labour market and the system of social security creates an intensive system of consultation and care in coordination with economic needs. A special levy compensates communities for not utilizing water resources for hydro-electric power and protecting sensitive landscapes instead.

Cantonal laws and fees

The community of St. Gall charges an additional fee on energy to enlarge the production and use of regenerative energies and to save energy. In all cantons a fee on the quantity of waste reduced the total amount by about 20 percent. Even more efficient is a new levy, which charges sewage water according to the quantity and quality of different chemicals. In AR a project presently aims at maintaining the very liberal legal framework and developing tools for quality management in 'alternative' or complementary methods of medical treatment. The canton also passed a law on the use of energy which includes the promotion of renewable energies as a prominent demand. The canton AI passed a law on the protection and cultivation of alpine pastures by agricultural and tourism use in the high mountain area.

Guidelines and administrative reforms

The canton AR revised its constitution, the canton SG is in the process of revision, based a broad process of citizens' participation. While reorganizing the administration in AI it was possible to reduce the number of the members of the cantonal government. AR established a concept for regional development which is founded on a wide understanding of 'quality of life' and is now respected by many sectoral policies. The concept has been worked out with a well organized and intense public discussion and contains not only general guidelines but also the responsibilities of different actors and a number of concrete projects. The canton also developed guidelines for health policy, which include chapters on natural and alternative methods of medical treatment.

Contracts

In the mountain area of AI contracts are proposed between mountain and lowland farmers on the use of organic fertilizers from lowland cattlestock in alpine farming. In AR the government successfully signed contracts with individual farmers about measures to improve the water quality. The city of St. Gall realized a longterm project of reallocation of land; during the project a fundamental change of the goals was reached which enabled the local administration to focus on ecological issues.

Plans, programmes and projects

Urban planning in the city of St. Gall promotes a functional mixture of land use which is coordinated with public transport infrastructure. Zones of 30 km/h speed limits were introduced in 43 residential areas in the context of the 'clean-air-programme'. Concerning settlement growth the canton AR disposed of one of the most restrictive development plans (Richtplan) in Switzerland. The department of education in SG has built up a working group to initiate a model of 'lifelong learning'. In SG an Internet homepage promotes the discussion on the new constitution; another part of the homepage informs about the cantonal economy through an on-line service for calculating regional wages, taxes, fees and social costs; a land and building index should be available soon. In the region a new trade fair started in 1997 to help agriculture in marketing and cooperation. AR is the first canton to hand out a 'manual on saving energy' to its communes.

Intercantonal cooperation

There are many examples for the cantonal cooperation within the region and across the borders. The main axes of cooperation are either between the cantons AI and SG or between all three cantons together with other cantons in the greater region 'Eastern Switzerland'. There are many issues of co-operation, for example: Seven cantons of Eastern Switzerland and the

Principality of Liechtenstein founded together a therapeutic center for drug addicts. Since 1995, cooperation against corruption has been institutionalized between the cantons SG and AR. The tourism association of both Appenzell's took measures against the negative effects of tourism traffic and runs a tourist booking system. Because of the high number of intercantonal commuters, coordination of transport policies in AR and SG is envisaged. Moreover there are cooperative projects and communal associations on different problems.

International cooperation

In 1959, the unhealthy ecological condition of the Lake of Constance led to a very successful international commission to protect the lake's water-quality. There is a German-Swiss Regional Planning Commission for coordinated spatial planning. Furthermore the working group ARGE-ALP, which covers all alpine regions, works on common problems like transport, protection of nature, the economy in the Alps and so on. In the Euregio Bodensee a transnational cooperation was institutionalized on a very low administrative level with the Bodensee Council accompanied by the 'International Lake-of-Constance-Conference' (IBK) with members of the higher political levels. The IBK has working groups for economy, environment, tourism, transport, technology, culture and health. There also is an 'association on tourism in the Regio Bodensee' as well as other organizations. Three locations of trade and industrial fairs in Germany, Austria and St. Gall cooperate and organize different fairs with alternate locations. Two international cooperative tourism projects have been founded (museums and castles, museums of natural history). The communities located at the shore of the Lake of Constance cooperate in an institutional framework to solve common problems like the impact of secondary residences or the protection of the shoreline. In 1995 an inventory of gravel stocks in the Regio Bodensee was published and used as a base for an international agreement on quarrying. The transborder public transport will be developed gradually; meanwhile a Swiss railway company serves German destinations as well. There is a commonly published timetable for public transport (railways, buses, ships). Together with the new 'guidelines for the Regio Bodensee' a third ferry was launched to improve the connection between Friedrichshafen (Germany) and Romanshorn (SG). Until now the planning and financing of this ferry has been the biggest project for transborder cooperation in the Regio Bodensee. The 'Electronic Mall Bodensee' is a highly frequented and rapidly growing marketplace on the Internet.

4.5.3 Human Capital

Organization

In the Swiss political system the electorate counterbalances a 'grand coalition' in the federal government. Cantons and communes have an extended autonomy and a far-reaching authority. The communal level in Switzerland is the historical nucleus of the organisation of state. The City of St. Gall is the sixth largest city in Switzerland. In the Swiss federal structure, an important part of the financial competences and the implementation and regional specification of policies are delegated to the cantonal level. Cantons also have their own constitution and laws and execute the law to a great extent. The examined region encompasses three Swiss cantons: the ring-like canton St. Gall (SG) surrounds the Appenzellerland which was divided into two 'half-cantons' 400 years ago: the catholic part 'Innerrhoden' (AI) and the protestant part 'Ausserrhoden' (AR). The decentralized political structure in Switzerland has different instruments to deal with regional disparities in different regional delimitations.

Demography

The focus region has a size of 2.366 square kilometers and is populated by half a million people. The population density varies from 224 persons per square kilometers in SG to only 85 persons per square kilometers in the mountain area of AI. Since end of the last century the population of SG grew at a rate which was below Swiss average whereas the formerly densely populated mountain area (AR and AI) did not grow much at all. From 1960 to 1970 nearly half of all people aged between 15 and 25 years in the high mountain area emigrated. But in the last fifteen years a strong growth of population can be seen in some parts of the region.

Social fabric

The area examined combines densely populated industrial and service districts on the one hand, on the other hand parts of the region are characterized by dispersed settlement patterns, intense agriculture as well as larger areas of mountains or alpine pastures with cattle grazing and dairy production. Due to geographical differences, the income per capita varies accordingly. The unemployment rates are clearly below Swiss average as are the GDP per inhabitant. The average living space per person increases at a rate of 0,2-0,3 m² per year. The pressure of settlement on the countryside increases as well as the number of commuters towards the City of St. Gall and the lower Rhine Valley. In the city of St. Gall some tendencies towards de-urbanization can be identified.

Health

The region has a strong tradition of rehabilitation and sanatoria, the number of hospital beds is above average. The canton AR traditionally has a very liberal legal framework for naturally or complementary oriented medical treatment. Some mountain parts of the region are characterized by statistical data which are typical for peripheral regions: high infant mortality rates in the first weeks, high rate of suicides, low rate of infectious diseases and low rate of crimes.

Culture and regional identity

The city of St. Gall is the cultural center of the region for youth and advanced culture. The monastery is a cultural heritage site of the UNESCO. The 'Appenzell county' has its own image. Here traditional customs are still strongly rooted among the inhabitants and are seen as a part of regional identity and a potential for tourist development. There are increasing discussions about the clichés of a rural, traditional area which have a touch of 'backwoods'. This may be positive to develop a certain kind of tourism but it is a hindrance to the image of a modern working-region. The analysis of the quality of life among military recruits shows that AR and AI are seen by their inhabitants as likeable i.e. beautiful and cosy but backward and boring cantons. This image was mostly confirmed in a consecutive survey (1987/1996). Nevertheless the recruits state that the Appenzell County is in the middle of the canton St. Gall 'like a five-franc piece in a cow-pat'. The canton of SG ranks around the Swiss average in this quality-of-life survey.

Education and learning

Concerning different educational indicators the region also ranks around the Swiss average. The city of St. Gall has a university (management, economics, law) which was founded in 1898 as a Graduate School. Different colleges in the region (engineering, social work and others) will soon be restructured to a regional holding of higher educational institutions. Education for children is mainly the task of the cantonal level.

4.5.4 Human-made Capital

Technology, research and innovation

Expenditures for research and development are below Swiss average. There are shortages in the supply of telecommunication infrastructure in mountain areas. On the other hand the lack of a coherent technology policy in Switzerland leads to a rich structure of institutions to promote technology and technological transfer. The 'CIM Association East Switzerland' and the EMPA, a research institution for testing materials are of special significance in the region. The canton of St. Gall plans to establish a virtual technological transfer centre on the Electronic Mall Bodensee. There are examples of innovative use of new technologies by SMEs mostly in cooperation with the Institute for Technology Management (University of St. Gall).

Agriculture

The landscape of the examined region is strongly characterized by agriculture with small holdings and the main focus on dairy and livestock farming and especially by the production of milk and cheese. Organic agriculture increases and is promoted by the cantons but is still slightly below Swiss average. In AI and AR a great number of small farms are closing down. The remaining farmers depend on a high share of leased land. The economy of the mountain area is dominated by the agricultural structure which covers in AI 17% of all employed people. The canton AR has the highest rate of controlled ecological agriculture in Switzerland.

Economic structure

The three cantons of the region are connected by intense commuting patterns. Other economic figures show that AR profits from its location near the agglomeration of St. Gall. The canton of St. Gall dominates all figures of economic development. The examined region is below Swiss average in productivity and competitiveness (GDP per work-place and GDP per inhabitant), but the high rates of commuting within and outside the region will level out the results. In the mountain area the economic structure is characterized by agriculture, tourism and small-sized business and trade; there exists a rich potential of SMEs. The cantons AI and AR fare very well with respect to the rate of unemployment. In the canton St. Gall the degree of industrialization is high (1994: 47%) but the level of wages is 6 % below Swiss average because of the high degree of industry with value added below average.

Industry and business

The economic structure is biased towards industry with a high share of industries with value added below average. Concerning the percentage of industrial jobs, a further decline of employment can be expected. Textile and clothing industry can be found all over the examined region. Industry is small but shows growth; other important branches are the chemical industry, machinery, metal and partly the electronics/ electrotechnical industry. The degree of internationalization of the production is above average in the whole region. In the mountain region (especially the canton AR) it is just the other way around. At a distance from the three clusters of activity, the 'Lower Rhine Valley', 'Lake of Constance' and 'St. Gall' the industrial production is characterized by small firms.

Services, tourism

Services do not play an important role with the exception of the tourism- and health-oriented services and the commercial services around the highly industrialized areas. In AI, weekend and seminar tourism is seen as one of the main development potentials. Rehabilitation and

health tourism have slowly reached their limits of capacity but will be extended. Sports and entertainment facilities mainly correspond to clients having traditional ideas on tourism. Some of the smaller businesses do not deliver the required standard of accommodation and catering. In some parts of the region between the Säntis (2.503 m) and the lake of Constance weekend and tourism day trips hold a share of about 40% of all turnover in tourism, which generates a lot of individual traffic in the canton.

Transport

Due to the federal structure the Swiss motorway system is a dense network which connects all important towns in Switzerland. The region can be reached by train from Zürich and the airport in half an hour. The 'Eurocity' train to Munich also makes a stop in the city of St. Gall. The border cities of St. Margarethen and Buchs will be developed as distributional centers for goods. There are daily flight connections to Vienna from the airstrip of Altenrhein near the Lake of Constance. The number of commuters leaving the canton increased from 4.400 to 12.000 between 1970 and 1990. Consumption patterns are oriented towards the agglomeration of St. Gall with the exception of the southern and south-western parts of the region (Rapperswil, Sarganserland). Despite a high share of public transport for some commuting, the public transport in general requires improvement and upgrading as a locational factor. The quality of public transport is quite good in the city of St. Gall. Slow traffic (walking and cycling) are not yet promoted as serious alternatives in transport.

Built and urban development

On the whole the villages' appearance is well-kept, but in the smaller villages of the mountain area there are only few shops or small enterprises. Villages around the cities slowly turned into dormitories, where people live but do not work anymore. The small extension of the region, the disperse settlement and the different centers within and around the region generate all typical effects of centers and their surrounding areas.

4.5.5 Natural Capital

Soils and topography

A greater part of the region's area has been officially designated as an 'area with difficult conditions of production and living' in the national context. In the region there are not many 'areas of rotation of crops' (to maintain the food supply in times of crisis) delimited by the state because of the geographical location and topography of the region. Intensive cattle and dairy farming is prevalent, the mountain agriculture in general is discriminated compared to the agriculture in the lowlands.

Forests

The forestry could be a more important part of the regional value added. In the mountain part of the region over 30 % of the area is covered by forests and more than half of the forests are owned by farmers; most of the rest is public property. One problem is the topography with many steep valleys, another problem the quality of forests which formerly became afforested with unadapted species of trees. The cultivation of the forests is hindered economically by cheap imports of wood and by forest-damage caused by animal grazing.

Landscape

The beauty of the landscape is seen as an important asset for tourism especially in the mountain region, which is more and more threatened by dispersed settlement, urbanization, dense technical infrastructure and intensive agriculture today. The countryside surrounding St. Gall is used as a recreational area. There is a dense network of hiking trails in the mountains. The erratic snowfall does not secure the whole skiing season. The offers for new types of sports are generally very good but they can disturb the ecological balance in some instances. Nearly one third of the area of the region is set aside as areas of natural protection.

Energy

The shares of hydro-electric power decreased but will be pushed by the three cantonal governments. Investments in solar energy grow and there are strong endeavours towards renewable energies by the cantonal and municipal departments and by private interest groups. In the dispersed settlements of the mountain area decentralized heating of building (oil and wood) is predominant.

Water resources

The center of the region has very rich stocks of ground water. Some water protection zones are still being verified at the moment. The quality of wells on certain farms is in decline. In some chalk formations the sensitivity for water pollution is significant. One of the main problems is the water quality of surface water but there are efforts to make these resources usable again by preventing the overutilization of agricultural fertilizers. Nevertheless some learning processes on behalf of the farmers have begun. This tendency is supported by individual contracts between the canton and farmers especially in the canton AR.

Air

In greater parts of the region, especially the mountain area, there are no problems with the quality of air. Some roads today regularly show problems of congestion; noise and air pollution has reached critical levels. The main reason is private individual traffic. The air pollution deposits from the agglomerations threaten some climatic health resorts. Locational and topographical reasons (fog limits, air circulation) add to the problem.

Waste and sewage

The existing equipment for the treatment of sewage fulfil legal standards. The total amount of private waste has declined. The main problems are the deposits of sewage sludges and the quantity of waste coming from construction activities. Gravel is quarried in seven places in the mountain area. At six sites, where formerly gravel was extracted, now building material is dumped.